SAFETY DATA SHEET

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product Name:	**Multi Functional Cal-Hypo Granules**
Datasheet Number:	087 1. 4. 0
Chemical Name:	Calcium hypochlorite
Index Number:	017-012-00-7
CAS No.:	7778-54-3

1.2 Relevant identified uses of the substance or mixture and uses advised against

Pool / spa treatment

1.3 Details of the supplier of the safety data sheet

Name of Supplier:	Plastica Ltd
Address of Supplier:	Perimeter House Napier Road St Leonards-on-Sea East Sussex TN38 9NY United Kingdom
Telephone:	+44 (0) 1424 857857
Fax:	
Responsible Person:	
Email:	info@plasticapools.com

1.4 Emergency telephone number

0800 043 0891 - Technical
0800 043 0892 - Emergency

2 Hazards identification

2 .1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
- Acute Tox. 4, H302
- Skin Corr. 1B, H314
- STOT SE 3, H335
- Aquatic Acute 1, H400
- EUH206
- EUH031
- Classification (67/548/EEC, 1999/45/EC)
- C: R34
- Xn; R22
- R31
- Xi; R37
- N; R50
- Additional information: For full text of R-phrases and Hazard- and EU Hazard-statements: see section 16

2 .2 Label elements

2 Hazards identification (....)

- Signal Word: Danger
- Symbols: GHS05, GHS07, GHS09

Hazard phrases

- Harmful if swallowed.
- Causes severe skin burns and eye damage.
- May cause respiratory irritation.
- Very toxic to aquatic life.
- Warning! Do not use with other products. May release dangerous gases (chlorine)
- Contact with acids liberates toxic gas.

Precautionary Phrases

- Store locked up/Keep out of reach of children.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- IF exposed or concerned: Get medical advice/attention.
- Avoid release to the environment.

2 .3 Other hazards

- Very toxic to aquatic organisms.

3 Composition/information on ingredients

3.1 Mixtures

Chemical Name	Concentration	CAS Number	EC Number	R/H Phrases*	Symbols
Calcium hypochlorite	30-50%	7778-54-3	231-908-7	H272, H302, H314, H400, EUH031, R8, R22, R31, R34, R50	GHS03, GHS05, GHS07, GHS09, O, C, N

Inert fillers

*See Section 16

4 First aid measures

4 .1 Description of first aid measures

- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

4 First aid measures (....)

do. Continue rinsing.
- Get immediate medical advice/attention.
- IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
- Give plenty of water to drink

4 .2 Most important symptoms and effects, both acute and delayed
- Can cause damage to the eyes
- Can cause damage to the skin
- Prolonged skin or eye contact may cause chemical burns
- In cases of severe exposure, breathing difficulty may develop

4 .3 Indication of immediate medical attention and special treatment needed
- Treat symptomatically

5 Fire-fighting measures

5 .1 Extinguishing media
- In case of fire: use water, foam or dry agent for extinction

5 .2 Special hazards arising from the substance or mixture
- Corrosive
- Gives off irritating or toxic fumes (or gases) in a fire.
- See Section 10.6

5 .3 Advice for firefighters
- In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.
- Wear protective clothing as per section 8

6 Accidental release measures

6 .1 Personal precautions, protective equipment and emergency procedures
- Wear protective clothing as per section 8
- Evacuate the area and keep personnel upwind
- Avoid raising dust
- Damp down to avoid dust generation
- Avoid contact with combustible material

6 .2 Environmental Precautions
- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6 .3 Methods and material for containment and cleaning up
- Remove by mechanical means
- Collect as much as possible in clean container for reuse or disposal
- Do not absorb spillage in sawdust or other combustible material
- Seek expert advice for removal and disposal of all contaminated materials and wastes

6 .4 Reference to other sections
- See Section 7 & 8

7 Handling and storage

7 .1 Precautions for safe handling

- Avoid raising dust
- Ensure adequate ventilation
- Avoid contact with combustible material
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Do not eat, drink or smoke when using this product.
- Wash thoroughly after handling.

7 .2 Conditions for safe storage, including any incompatibilities

- Store away from other materials.
- Store in a dry place. Store in a closed container.
- Store in a well-ventilated place. Keep cool.
- Keep only in original container.

7 .3 Specific end use(s)

- No information available.

8 Exposure controls/personal protection

8 .1 Control parameters

- WEL (inhalable dust) 10 mg/m3
- WEL (respirable dust) 4 mg/m3

Calcium hypochlorite

- WEL (short term) 0.5 ppm
- WEL (short term) 1.5 mg/m3

8 .2 Exposure controls

- Engineering controls should be provided which maintain airborne concentrations below the relevant guidelines

Occupational exposure controls

- In case of inadequate ventilation wear respiratory protection.
- Wear suitable protective clothing, including eye/face protection and gloves (rubber are recommended)
- When handling this substance, e.g. sampling, wear goggles giving complete eye protection

Respirator Goggles Gloves Suit

9 Physical and chemical properties

9 .1 Information on basic physical and chemical properties

- Odour: chlorine
- Appearance: white, powder
- pH - not known
- Boiling point - not applicable
- Vapour pressure - not applicable
- Vapour density - not applicable

9 Physical and chemical properties (....)

- Melting point - not known
- Water solubility 180 g/l
- Specific gravity 0.9 g/cm3
- Flammable
- Oxidising
- Partition coefficient : n-Octanol/water - not known
- Evaporation rate - not known
- Viscosity - not applicable

9 .2 Other information

- No information available

10 Stability and reactivity

10 .1 Reactivity

- Warning! Do not use together with other products. May release dangerous gases (chlorine).

10 .2 Chemical stability

- Stable under normal conditions

10 .3 Possibility of hazardous reactions

- Contact with acids liberates toxic gas.

10 .4 Conditions to avoid

- Keep away from heat and sources of ignition

10 .5 Incompatible materials

- Incompatible with acids and alkalis
- Incompatible with reducing agents
- Contact with acids liberates toxic gas.
- Incompatible with organics

10 .6 Hazardous Decomposition Products

- Decomposition products include chlorine.

11 Toxicological information

11 .1 Information on toxicological effects

- LD50 (oral,rat) 850 mg/kg

Inhalation

- Causes coughing
- Can cause damage to the mucous membranes
- In cases of severe exposure, burning sensation may develop

Contact with skin

- Can cause damage to the skin
- Causes blistering of the skin

11 Toxicological information (....)

Contact with eyes

- Causes severe irritation
- Can cause damage to the eyes

Ingestion

- Can cause damage to the digestive system
- May cause burns to mouth and throat

Carcinogenicity

- No evidence of carcinogenic effects

Teratogenicity

- No information available

Mutagenicity

- No information available

12 Ecological information

12 .1 Toxicity

- LC50 (fish) 0.15 mg/l (96 hr)

12 .2 Persistence and degradability

- Biodegradable

12 .3 Bioaccumulation Potential

- No bioaccumulation potential

12 .4 Mobility in soil

- Completely soluble in water

12 .5 Results of PBT and vPvB assessment

- Not a PBT according to REACH Annex XIII

12 .6 Other Adverse Effects

- Very toxic to aquatic organisms.

13 Disposal considerations

13 .1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation

Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)

14 Transport information

Corrosive

ENVIRONMENTALLY HAZARDOUS

14.1 UN Number
1759

14.2 UN Proper Shipping Name
CORROSIVE SOLID, N.O.S.
(CALCIUM HYPOCHLORITE)

14.3 Transport hazard class(es)

14.4 Packing group
III

14 .5 Environmental hazards

- Very toxic to aquatic life.

14 .6 Special precautions for user

- See Section 7

14 .7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

- Not applicable

Other information

Road/Rail (ADR/RID)

Proper Shipping Name:	CORROSIVE SOLID, N.O.S. (CALCIUM HYPOCHLORITE)		
ADR UN No.:	1759		
ADR Hazard Class:	8	ADR Packing Group:	III
Tunnel Code:	E		

Sea (IMDG)

Proper Shipping Name:	CORROSIVE SOLID, N.O.S. (CALCIUM HYPOCHLORITE)		
IMDG UN No.:	1759		
IMDG Hazard Class.:	8	IMDG Pack Group.:	III

Air (ICAO/IATA)

Proper Shipping Name:	CORROSIVE SOLID, N.O.S. (CALCIUM HYPOCHLORITE)		
ICAO Un No.:	1759		
ICAO Hazard Class.:	8	ICAO Packing Group.:	III

15 Regulatory information

15 .1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Refer to current ADR Regulations
- Refer to current CPL Regulations

15 Regulatory information (....)

- Refer to current EC Directive 82/501/EEC (the Seveso Directive)
- The List of Wastes (England) Regulations 2005 apply in the UK

15 .2 Chemical Safety Assessment

16 Other information

Text of R and S phrase codes used in this safety data sheet:- EUH031: Contact with acids liberates toxic gas.; H272: May intensify fire; oxidizer.; H302: Harmful if swallowed.; H314: Causes severe skin burns and eye damage.; H400: Very toxic to aquatic life.; R22: Harmful if swallowed; R31: Contact with acids liberates toxic gas; R34: Causes burns; R50: Very toxic to aquatic organisms; R8: Contact with combustible material may cause fire.

The statements made herein are based on our best present experience and are intended to describe product safety requirements. They should not therefore be considered as a warranty of specific properties.